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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/502,426A

DATE: 03/13/2003 116

TIME: 13:52:27

39.6

Input Set : A:\11696-070001.txt

Output Set: N:\CRF4\03132003\I502426A.raw

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5 tctacaaggc tgtaaccatc tgcaactatt aaattgctt ctttaatgca tcttaacat 1560
57 atttattgtt agttggatt taataagagc gaacttggtaa cattacaata ttatattag 1620
58 atactagat gtgattattc caaatacata ctttggatgt ttaaacttaa tcttggatct 1680
59 tcctacggta taaatattaa tcatcgaggt aaaaaaagtt ttgtcttatt ttcgcgatgc 1740
60 atgaaggata aacctaatga cttaatttt ttgaaaatgt aacccttta ctcatacgatt 1800
61 aattaccgta tggtttgtt gccataatga cagcctctac aactgtgata gtcaatttt 1860
62 tctgcaaata ttaaatttagg aattcaatgc tactatcaat agaagaaaca gctgagttt 1920
63 acatttaat ttaaagacaa aattttgaa aatgttata atttctaaca atattattaa 1980
64 aatatgatgc ctataatgtt tttcctatgt tcttaaataa tttttttta tatttagtta 2040
65 taaatacatt atgaaccaat aatagttggt gaattcaaat atctccatta atattttt 2100
66 aatctacaa attattaata tttagtcaat aacaatgcat agaaagttc aaaaaaatt 2160
67 ttgttaacag aaacttccaa atttttttt tttatggac aagaaataac agatagaaaa 2220
68 ctatttgtt gtggaatgga agtagtaata tacattaagc aaattttaaa aaattatata 2280
69 agctatacg cgctcaaagt atgttatcta gtaggtgtaa ttaataatgc atggtgcgat 2340
70 tcagaattgg gacaacaatg aaaacggat taaaatatta acttttaaat aaataaaaat 2400
71 tttagttaat gtgtttctg actattgagg ggcaaaaaaa agacaatgccc aaaaagtctac 2460
72 gggtttgact gtccagttcg gtaataatct aataactctg tctttgaccg cacgctcg 2520
73 taggggtcct tctgacattt tcactgttct acccctactc gtgagccac cttttccca 2580
74 tatcctaagg gtaattttgg aaatcccaat taaaaccat tgagaccgtt ccggacttcc 2640
75 tggattctg ctggagcatt tatcaaaaat tattagcagc aatgggttta ttaattttaa 2700
76 aactcacaac ttgatcagat aaaatttcat aaacactttt acgatggatt cgtacgatct 2760
77 atctaattgac tttttttttt ctaccacggg ggtgaaatg tatagtacta ttagccagag 2820
78 acaattgatt atagatatac ccattaaatcc atgatattt tgatataaat agctgtt 2880
79 ctatccagc atcgacgtt tctgcaactt ttgttttaa ttaaagagtt taataaataa 2940
80 aagtattaaa aggagcataa cgaggcaaca aaagtaatga acacggagaa acaaaagcca 3000
81 tgaagctcat tggtagttt aagtttaata agaagattttt attaaattttt aatgacgatg 3060
82 ataacaattt tattttctga cttctttaaa accccctttt acaaacagaa gctcccttt 3120
83 tcagtagaaag tccgattccc aatcttaaag acaaagccat tagaaagagaa aagttagtga 3180
84 gagagagaga gaaacttagt ccatgttcga aacagagcat catactctct tacctctt 3240
85 tcttctccca tcgtttttgt ctcttcttct ctcttgatt ctcttgaaga gaagaaatag 3300
86 aaaaaccaga ttcaatctac ctccgggtaa atccgggtgg ccatttcttgc gtgaaaccat 3360
87 cggttatctt aaaccgtaca ccggccacaac actcggtgac ttcatgcaac aacatgtctc 3420
88 caagtaaaca acaacatctt ccaaaaactc aaaaaataaa atcctctgtt ttgaaattt 3480
89 gactaatgtt gtttattttt caggtatggt aagatataa gatcgaactt gttggagaa 3540
90 ccaacgatcg tatcagctga tgctggactt aatagattca tattacaaaa cgaaggaagg 3600
91 ctcttgaat gtagttatcc tagaaagtata ggtgggattt ttggaaatg gtcgatgctt 3660
92 gttcttggtg gtgacatgca tagagatatg agaagtatct cgcttaactt cttaaagtac 3720
93 gcacgtctta gaactattct actaaagat gttgagagac atactttgtt ttttcttgat 3780
94 tcttggcaac aaaactctat ttctctgtt caagacgagg ccaaaaaggt ttttattttt 3840
95 atctttatt ttgctaaatt ttttggtaa tgaatcttta gagttctaa cttttttttt 3900
96 ttaaattgaa cagttacgt ttaatctaat ggcgaagcat ataatgagta tggatcctgg 3960
97 agaagaagaa acagagcaat taaagaaaga gtatgtact ttcatgaaag gagttgtctc 4020
98 tgctcctcta aatctaccag gaactgttca tcataaagct cttcaggtac atttattttt 4080
99 ttttgcgtta aagtccacaa ctctcattat aggttttaa ttttattttt tttgtttaat 4140
100 aaaatatcta aatgggtgt gtgtcacga gcaacgatata tgaagttcat tgagggaaa 4200
101 atgaaagaga gaaaatggg tatcaaggaa gaagatcaag aagaagaaga agtggaaaaca 4260
102 gaggatgaag cagagatgag taaggtgat catgttagga aacaaagaac agacgatgtat 4320
103 ctttggat gggttttgaa acattcgaat ttatcgacgg agcaaattt ctatcattt 4380
104 cttagttgtt tatttggccqg acatqagact tcttctgttgc ccattqctct cgctatctt 4440

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157	20	25	30
158	Arg Lys Thr Arg Phe Asn Leu Pro Pro Gly Lys Ser Gly Trp Pro Phe		
159	35	40	45
161	Leu Gly Glu Thr Ile Gly Tyr Leu Lys Pro Tyr Thr Ala Thr Thr Leu		
162	50	55	60
164	Gly Asp Phe Met Gln Gln His Val Ser Lys Tyr Gly Lys Ile Tyr Arg		
165	65	70	75
167	Ser Asn Leu Phe Gly Glu Pro Thr Ile Val Ser Ala Asp Ala Gly Leu		
168	85	90	95
170	Asn Arg Phe Ile Leu Gln Asn Glu Gly Arg Leu Phe Glu Cys Ser Tyr		
171	100	105	110
173	Pro Arg Ser Ile Gly Gly Ile Leu Gly Lys Trp Ser Met Leu Val Leu		
174	115	120	125
176	Val Gly Asp Met His Arg Asp Met Arg Ser Ile Ser Leu Asn Phe Leu		
177	130	135	140
179	Ser His Ala Arg Leu Arg Thr Ile Leu Leu Lys Asp Val Glu Arg His		
180	145	150	155
182	180	185	190
183	182 Thr Leu Phe Val Leu Asp Ser Trp Gln Gln Asn Ser Ile Phe Ser Ala		
185	195	200	205
186	210	215	220
188	215	220	
189	Tyr Val Thr Phe Met Lys Gly Val Val Ser Ala Pro Leu Asn Leu Pro		
191	225	230	235
192	235	240	
194	Gly Thr Ala Tyr His Lys Ala Leu Gln Ser Arg Ala Thr Ile Leu Lys		
195	245	250	255
197	255		
198	260	265	270
200	265		
201	270		
203	Lys Ser Asp His Val Arg Lys Gln Arg Thr Asp Asp Asp Leu Leu Gly		
204	275	280	285
206	285		
207	290	295	300
209	300		
210	305	310	315
212	315	320	
213	325	330	335
215	335		
216	340	345	350
218	345	350	
219	355	360	365
221	365		
222	370	375	380
224	380		
225	385	390	395
227	395	400	
228	405	410	415

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230 Ser Arg Tyr Asp Gln Pro Asn Leu Phe Asn Pro Trp Arg Trp Gln Gln
231 420 425 430
233 Gln Asn Asn Gly Ala Ser Ser Ser Gly Ser Gly Ser Phe Ser Thr Trp
234 435 440 445
236 Gly Asn Asn Tyr Met Pro Phe Gly Gly Gly Pro Arg Leu Cys Ala Gly
237 450 455 460
239 Ser Glu Leu Ala Lys Leu Glu Met Ala Val Phe Ile His His Leu Val
240 465 470 475 480
242 Leu Lys Phe Asn Trp Glu Leu Ala Glu Asp Asp Gln Pro Phe Ala Phe
243 485 490 495
245 Pro Phe Val Asp Phe Pro Asn Gly Leu Pro Ile Arg Val Ser Arg Ile
246 500 505 510
248 Leu
252 <210> SEQ ID NO: 3
253 <211> LENGTH: 24
254 <212> TYPE: DNA
255 <213> ORGANISM: Artificial Sequence
257 <220> FEATURE:
258 <223> OTHER INFORMATION: Description of Artificial Sequence: primer D4OVERF
260 <400> SEQUENCE: 3
261 atgttcgaaa cagagcatca tact 24
262 <210> SEQ ID NO: 4
263 <211> LENGTH: 21
264 <212> TYPE: DNA
265 <213> ORGANISM: Artificial Sequence
267 <220> FEATURE:
268 <223> OTHER INFORMATION: Description of Artificial Sequence: primer D4PRM
270 <400> SEQUENCE: 4
271 cctcgatcaa agagagagag a 21
273 <210> SEQ ID NO: 5
274 <211> LENGTH: 29
275 <212> TYPE: DNA
276 <213> ORGANISM: Artificial Sequence
278 <220> FEATURE:
279 <223> OTHER INFORMATION: Description of Artificial Sequence: primer D4RTF
281 <400> SEQUENCE: 5
282 ttcttggtga aaccatcggt tatcttaaa 29
284 <210> SEQ ID NO: 6
285 <211> LENGTH: 26
286 <212> TYPE: DNA
287 <213> ORGANISM: Artificial Sequence
289 <220> FEATURE:
290 <223> OTHER INFORMATION: Description of Artificial Sequence: primer D4RTR
292 <400> SEQUENCE: 6
293 tatgataaagc agttcctggc agattt 26
295 <210> SEQ ID NO: 7
296 <211> LENGTH: 21
297 <212> TYPE: DNA
298 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING ERROR SUMMARY
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:25; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22
Seq#:25; Xaa Pos. 23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,42,43,46
Seq#:25; Xaa Pos. 48,50,56,57,58,61,62,63,64,65,66,67,68,72,82,92,93,94,95
Seq#:25; Xaa Pos. 96,97,102,107,108,111,112,113,114,126,128,136,138,142,146
Seq#:25; Xaa Pos. 148,149,153,154,156,160,163,165,166,168,175,178,180,183
Seq#:25; Xaa Pos. 184,185,186,190,193,197,201,203,204,206,207,208,209,212
Seq#:25; Xaa Pos. 213,216,217,218,219,221,228,229,230,232,233,236,237,239
Seq#:25; Xaa Pos. 240,242,244,245,246,247,250,252,254,268,272,276,281,282
Seq#:25; Xaa Pos. 284,287,288,289,290,291,292,293,294,295,296,298,300,302
Seq#:25; Xaa Pos. 306,307,308,309,310,311,312,313,314,315,316,317,318,319
Seq#:25; Xaa Pos. 320,321,322,323,324,325,326,334,336,337,338,339,340,341
Seq#:25; Xaa Pos. 345,346,347,348,352,355,357,359,360,372,374,375,381,387
Seq#:25; Xaa Pos. 389,395,398,403,404,405,408,411,412,418,421,432,437,440
Seq#:25; Xaa Pos. 442,451,459,471,481,484,485,487,488,489,490,494,495,496
Seq#:25; Xaa Pos. 497,498,499,500,501,502,503,505,506,526,535,541,542,543
Seq#:25; Xaa Pos. 545,546,547,551,555,558,566,567,570,571,572,573,574,575

VERIFICATION SUMMARY

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L:844 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:848 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:25
L:849 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0
M:341 Repeated in SeqNo=25